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Special Issue of Australian Journal of Environmental Education

Climate Fiction of the Anthropocene

Guest Editors: Susan Oliver (University of Essex), Cassandra Tytler (Edith Cowan University), Joseph Paul Ferguson (Deakin University), and Peta J. White (Deakin University)

The guest editorial team invites you to write for this Special Issue exploring Climate Fiction or Cli-Fi of the Anthropocene (arguably our current epoch).

In this Special Issue, we aim to showcase contributions that: theorise Cli-Fi and its vital role in environmental education; investigate innovative interdisciplinary research that engages with Cli-Fi; and/or provide Cli-Fi as creative practice-as-research with various visual and auditory representations. We welcome contributions that explore definitions of Cli-Fi, especially where they extend, revise, or challenge current parameters such as those between fiction and nonfiction, humanities and sciences that engage educationally.

What is Climate Fiction?

Climate fiction, or 'Cli-Fi', has been acknowledged as a literary practice for almost two decades, gaining currency as attention to human-induced climate change has accelerated (Goodbody & Johns-Putra, 2019). Reaching back before that time and looking forward—speculatively by definition—Cli-Fi has given rise to new forms of cultural texts that frequently, although not necessarily, disrupt existing genres and emphasise interdisciplinarity. Cli-Fi's multifaceted textual forms include, among others, print, performance, theatre, film, games, and visual art modes. These diverse perspectives on what Cli-Fi is—a unique genre, a subset of science fiction, or a broad conceptual framework for evaluating cultural production and its effects on the climate and environment in the Anthropocene—prompt a re-examination of fundamental disciplinary questions and debates around the power of the speculative within scholarship and educational frameworks.

What is distinctive in all Cli-Fi's positioning is the focus on the human-induced catastrophes of climate change and, consequently, its narrative on what life on Earth has and may become. Importantly, these fictions interweave the structural inequalities and violences that are inherently embedded within human-driven climate alterations (Leikam & Leyda, 2017). Indeed, due to its future-thinking, it may be tempting to conflate Cli-Fi with Science Fiction. However, much of Cli-Fi does not adhere to the genre conventions of Sci-Fi, and not all Sci-Fi centres on climate change. While Cli-Fi looks to future outcomes, it often grapples with notions of risk and the responses to it in the present. Mayer (2014) refers to this as "narratives of anticipation." In this sense, Cli-Fi is futurethinking but often through present conditions. It sits in the speculative space of anticipation and futuring. As Evans (2017) argues, Cli-Fi's multiple genre links, such as fantasy, mean that it is ripe not only to explore climate justice but also queer temporality. If Cli-Fi's future is linked to present failures, then current normative and exploitative social and environmental scripts are inadequate. In this sense, Cli-Fi can offer different futurities and ways of being. The criticality in this space comes from an engagement with present environmental and social conditions and futures based on scientific forecasts. Therefore, it could be argued that Cli-Fi is both fiction and non-fiction that is speculative.

Researchers such as Rousell, Cutter-Mackenzie and Foster (2017) see the speculative as having "the capacity to inhabit new bodies, landscapes, and planets; propose radical changes in social and political organizations; and explore the very limits of human experience through graphic description and visualisation" (p. 657). They point to the speculative as a tool that can be harnessed within climate change education as a resistance to the traumas of the climate emergency. Alongside Gough (2008) they engage with the speculative through Deleuze's and Guattari's geophilosophy, expanding the conceptual landscape of educational philosophy and engagement. This fictional approach is what Gough terms "rhizosemiotic play" (Gough, 2004b; 2006; 2007), arguing "that the binary opposition of fact and fiction is itself a fiction — a story fashioned to rationalise the strategies used by modernist researchers in the sciences and social sciences to produce facts (2008, p. 338). As Mayer (2014) points out, the fictional aspects of Cli-Fi "may ... succeed in making the various cultural, social, political, economic, and psychological factors ... more easily perceptible, intelligible, and concrete" (p. 23). Indeed, scientists such as James Hansen and Naomi Oreskes, as well as Erik Conway, who write about climate change, have included fictional sections in their texts to communicate their science in multiple forms (Weik von Mossner, 2017). In this scenario, Cli-Fi is a psychological, social, scientific, and political engagement that grapples with the potentialities born from human-induced climate change in a storied form.

Scholars such as Schneider-Mayerson (2019), Evans (2017), and Pierrot and Seymour (2020) point to the inherent and unspoken privilege embedded within many popular Cli-Fi narratives, where it is the 'universal' white and wealthy—"the monolithic and flattened "we" of homo sapiens"—whose lives are disrupted in the textual framework (Schneider-Mayerson, 2019, p. 2, emphasis in original). Existing inequalities between groups that are highlighted within climate justice movements have been ignored in many popular Cli-Fi narratives. Similarly, fictions around new dystopian worlds often erase Indigeneity altogether, expunging settler colonialism and environmental eradication from the narrative as if it never was (Anson, 2017). The temporal disconnect in apocalyptic language can fail to acknowledge "that the hardships many non-Indigenous people dread most of the climate crisis are ones that Indigenous peoples have endured already due to different forms of colonialism: ecosystem collapse, species loss, economic crash, drastic relocation, and cultural disintegration" (Whyte, 2018, p. 226). Gergan, Smith, and Vasudevan (2018) point to the apocalyptic conceptions within "scientific debates and cultural representations ... that escape specific culpability (for instance, in processes of settler colonialism, capitalism, or imperialism) and instead center [sic] a universal human frailty that ends with triumph, a clear moral, and a clean slate" (p. 2). Pierrot and Seymour (2020) have looked to "other ways of composing climate change" (p. 107) by looking to the Cli-Fi text Tentacles by Rita Indiana, which they argue has incorporated the present effects of colonisation and slavery on future stories, alongside queer and trans stories, citing the heteronormative project of colonialism that polices singular sexualities and genders.

The hybridity of terms that can encompass Cli-Fi, as well as its multiple mediums, communicates the cross-section of its scholarly and creative reckonings. Within literary criticism, there is climate change fiction, pet fiction, ecofiction, solarpunk, ecodrama, the risk novel, Anthropocene fiction; in cinema and media studies, there is ecocinema, ecomedia, Anthropocenema, crisis cinema, climate trauma cinema, and eco-trauma cinema; within the environmental humanities, there are media ecologies, petroculture studies, and energy humanities (Weik von Mossner, 2017). Thompson (2021) adds to this list, naming afrofuturism, africanfuturism, indigenous futurism, crip futurism, queer futurism, cyberpunk, solarpunk, ecopunk, hopepunk, ustopia, and ecotopia. These imaginaries that interweave hope, critique, reclamation, protest, guidance, and warning, amongst so much more, have their own lineages, ideologies, and approaches, yet can also be attached to the pluralities of Cli-Fi. Its transmediality and manifold genres present a variety of ways to "imagin[e] futurity" and "participate in the construction of social alternatives" (Evans, 2017, p. 99).

The intensity of the climate emergency seems to be too much of a psychological and economic burden for many to confront. Storytelling, in its various forms, can make-felt and untangle the complexities that stifle action and change. Therefore we call for authors to consider what the possibilities are for Environmental Education. This Special Issue for AJEE, *Climate Fiction of the Anthropocene*, like the term and its scholarly and cultural position itself, requests a variety of responses.

These could include:

- 1) Environment and climate activism in literature, theatre, film, television, visual arts, social media and disciplines in-between.
- 2) Examples of Cli-Fi used in education.
- 3) Histories and futures of Cli-Fi.
- 4) Cli-Fi as practice-as-research.
- 5) Cli-Fi as participatory action research
- 6) Live performance documentation, podcasts, the moving image, and visual arts.
- 7) The genres listed above (indigenous futurisms, afrofuturism, ecocinema, queer futurities etc.)
- 8) The role of Cli-Fi in scientific research.

Some literature on Cli-Fi and environmental education are cited in the references/bibliography.

Why is Cli-Fi important in Environmental Education?

Environmental Education (EE), and increasingly Climate Change Education (CCE), has been and will continue to be concerned with imagining possible futures (Auld et al., 2023), both good (utopia) and bad (dystopia) (Everth et al., 2023; Ott, 2023). As such, Cli-Fi has a central role to play in our enactment of EE in ways that empower young people to engage in not just futures thinking but also futures feeling (D'Avanzo, 2018). This is not just the consumption of Cli-Fi but, just as importantly, the creation and critique of Cli-Fi as part of understanding and re-imagining our world in radically different ways (Leavenworth & Manni, 2021; Talgorn & Ullerup, 2023).

Perhaps most critically, reimagining coexistence between humans and more-than-human others through Cli-Fi (Reinartsen, 2022) offers relational forms and perspectives on the environment to be rethought in ways that also make possible processes of decolonisation (Williams, 2023; Rousell & Peñaloza-Caicedo, 2023) that underpin what intersectional EE ought to be (Walker & van Holstein, 2023). Cli-Fi, whether expressed through literature, interactive media, creative practice, performance or multimodal storytelling, has the potential to enhance EE by exploring the emotional and psychological dimensions of climate change. In this way, Cli-Fi as part of EE is all about "climating" and "becoming-climat" (Verlie, 2017; 2019; 2021) the stories we engage with contribute to our understanding and integration of climate change into our lives. These new vocabularies disrupt conventional thinking, highlight overlooked aspects, and communicate complex experiences in ways that traditional forms may not.

We follow Stiegler (2013) and Ross (2019) in considering this role of Cli-Fi in futuring for better worlds as dreaming, but more specifically a proto-cinematic/arche-cinematic form of dreaming in the sense that we dream as moving images. To dream as a human is to create and play images in our heads and in our hearts. This is not to say that Cli-Fi as cinematic dreaming is restricted to film - although it certainly includes that form - for it includes all Cli-Fi media, with the commonality that these fictions are dynamic stories. In this way, to think and feel about futures in/as EE is to dream in vividly narrative ways; in other words, EE necessarily involves Cli-Fi. To be clear, this is not Cli-Fi as simply a resource to be used and abused, but rather Cli-Fi as a way of being environmental educators. As students and teachers of EE, we must dream.

In appreciating this intimate link between EE and Cli-Fi, we realise that EE needs to be transdisciplinary (Cabrera et al., 2023) for us to transformatively dream, to embrace these fictions full of potential to change our realities. Dreams must be inclusive of diverse ways of knowing and being (Schmidt, 2023). EE, and by extension CCE, is not a discrete subject to be taught, but rather a way of doing education in ways that challenge the status quo. And so, to do education in this way is to dream, to embrace Cli-Fi in all its forms.

The Invitation

This special issue calls for contributions in three sections:

- 1. Manuscripts theorising Cli-Fi and its application in EE.
- 2. Research practices that investigate and respond to Cli-Fi.
- 3. Actual creations of Cli-Fi (e.g., text and images, or videos of arts-based creative practice). Please indicate in your proposal which section you are writing for.

Timeline

- Call for papers: early August 2024
- Abstract proposals due: end of October 2024. Email abstracts (3-400 words) to Joe Ferguson (Joe.Ferguson@deakin.edu.au).
- Manuscripts due: February 2025 (Submit to AJEE, 6 7000 words, note the special issue)
- Publication of Special Issue: Volume 41 Issue 3 2025 (manuscripts published on FirstView asap)

References/Bibliography

Anson, A. (2017). American apocalypse: The whitewashing genre of settler colonialism. *Academia.edu* 1–10.

- Auld, G., O'Mara, J., & White, P. J. (2023). Urgency through education: Futures learning through children's literature. *Australian Journal of Environmental Education, 39*(2), 234–240.
- Cabrera, A.C.E., Agsalog, C.M.I., Ibea, R.C., Tara, O.E., Corpuz, J.R.A., & Tabunan, M.L. (2023). Climate fiction for the classroom through ecocriticism and collaborative digital text annotation. *The Asian Journal of Education and Human Development 4*(1), https://doi.org/10.69566/ajehd.v4i1.78
- D'Avanzo, C. (2018). Climate fiction as environmental education. *Bulletin of the Ecological Society of America*, 99(4), Article e01446.
- Everth, T., Gurney, L., & Eames, C. (2023). Assemblage drawings as talking points: Deleuze, posthumans and climate-activist teachers. *Australian Journal of Environmental Education*, *39*(2).
- Evans, R. (2017). Fantastic Futures? Cli-fi, Climate Justice, and Queer Futurity. *Resilience: A Journal of the Environmental Humanities*, 4(2–3), 94–110. <u>https://doi.org/10.5250/resilience.4.2-3.0094</u>
- Gergan, M., Smith, S., & Vasudevan, P. (2018) Earth beyond repair: Race and apocalypse in collective imagination. *Environment and Planning D: Society and Space* 0263775818756079. pp. 1–20.
- Gille, E. & Segerdahl. T. (2023). Using Climate Fiction in Education for Sustainable Development in the EFL Classroom: a Literature Review.

https://gupea.ub.gu.se/bitstream/handle/2077/79201/SPLL%C3%84R%202023-

026%20Gille%20Emelie%20och%20Segerdahl%20Tove%20Examensarbete%20LGEN2G.pdf?seq uence=1

- Goodbody, A., & Johns-Putra. A. (2019a). Cli-fi: a Companion. Peter Lang.
- Goodbody, A., & Johns-Putra. A. (2019). *Climate and Literature*. Cambridge University Press.

Gough, N. (2004). RhizomANTically becoming-cyborg: performing posthuman pedagogies. *Educational Philosophy and Theory*, 36:253-265.

Gough, N. (2006). Shaking the tree, making a rhizome: towards a nomadic geophilosophy of science education. *Educational Philosophy and Theory*, 38:625-645.

- Gough, N. (2007). Changing planes: rhizosemiotic play in transnational curriculum inquiry. *Studies in Philosophy and Education*, 26:279-294.
- Gough, Noel. (2008). Narrative experiments and imaginative inquiry. *South African Journal of Education*, *28*, 335–349.
- Kääpä, P., & Hunter, V. (2022). Film and Television Production in the Age of Climate Crisis: Towards a Greener Screen. Palgrave Studies in Media and Environmental Communication.
- Lindgren Leavenworth, M., & Manni, A. (2021). Climate fiction and young learners' thoughts—a dialogue between literature and education. *Environmental Education Research*, 27(5), 727–742. Leikam, S., & Leyda, J. (2017). Cli-Fi and American Studies: An Introduction. *Amerikastudien / American Studies*, 62(1), 109–114.
- Leyda, J. (2023). Anthroposcreens: Mediating the Climate Unconscious. Cambridge University Press.
- Mayer, S. & Weik von Mossner, A. (2014). *The Anticipation of Catastrophe: Environmental Risk in North American Literature and Culture*. Winter.
- Ott, A. (2023). Utopia in environmental and sustainability education: imagination, transformation, and transgression. *Environmental Education Research*, 29(5), 675–691.
- Parham, J. (2021). *The Cambridge Companion to Literature and the Anthropocene*. Cambridge University Press.
- Pierrot, B. & Seymour, N. (2020). Contemporary Cli-Fi and Indigenous Futurisms. *Departures in Critical Qualitative Research*. 9 (4): 92–113. doi: <u>https://doi.org/10.1525/dcqr.2020.9.4.92</u>
- Ross, D. (2019). Moving images of the Anthropocene: Rethinking cinema beyond anthropology. *Screening the Past, 44*.
- Stiegler, B. (2013). The organology of dreams and arche-cinema. Screening the Past, 13.
- Reinertsen, A. B. (2022). I contain multitudes. *Australian Journal of Environmental Education, 38*(3–4), 279–297.
- Reno, S. (2021). *The Anthropocene: Approaches and Contexts for Literature and the Humanities*. Routledge.
- Rosenthal, D. J. (19 September 2023). This course uses 'climate fiction' to teach about the perils that a warming planet faces. *The Conversation*. <u>https://theconversation.com/profiles/debra-j-rosenthal-1106207</u>
- Rousell, D., Cutter-Mackenzie, A., & Foster, J. (2017). Children of an earth to come: Speculative fiction, geophilosophy and climate change education research. *Educational Studies*, 53(6), 654–669. <u>https://doi.org/10.1080/00131946.2017.1369086</u>
- Rousell, D., & Peñaloza-Caicedo, A. (2022). Listening for futures along Birrarung Marr: speculative immersive experience in environmental education. *Australian Journal of Environmental Education*, *38*(3–4), 431–450.
- Schneider-Mayerson, M. (2019). Whose Odds? The Absence of Climate Justice in American Climate Fiction, *ISLE: Interdisciplinary Studies in Literature and Environment* 26(4).
- Talgorn E.,& Ullerup H. (2023). Invoking 'empathy for the planet' through participatory ecological storytelling: From human-centered to planet-centered design. *Sustainability, 15*(10), <u>https://doi.org/10.3390/su15107794</u>.
- Thompson, C. E., (September 14 2021). "From Afrofuturism to ecotopia: A climate-fiction glossary Find the climate-fiction genre that inspires you". Grist. https://grist.org/fix/climatefiction/afrofuturism-to-ecotopia-climate-fiction-glossary/
 - Verlie, B. (2017). Rethinking climate education: Climate as entanglement. *Educational Studies,* 53(6), 560-572.

Verlie, B. (2019). Bearing worlds: Learning to live-with climate change. *Environmental Education Research*, 25(5), 751-766.

Verlie, B. (2021). Learning to live with climate change: From anxiety to transformation. Routledge.

Visual Methodologies Collective. *Climate Imaginaries, Co-authored with Machines*. Amsterdam University of Applied Sciences. <u>https://visualmethodologies.org/all-gone/</u>

- Von Mossner, A. W. (2017). Cli-Fi and the Feeling of Risk. *Amerikastudien / American Studies, 62*(1), 129–138. http://www.jstor.org/stable/44982312
- Walker, C., & van Holstein, E. (2023). Beyond climate strikes: Intersectionality and environmental care. In J. Wynn & H. Cahill (Eds.), *Handbook of children and youth studies* (pp. 1-17). Springer
- Williams, L. (2023). From Indigenous philosophy in environmental education to Indigenous planetary futures: what would it take? *Australian Journal of Environmental Education*, *39*(3), 320–335.
- Whyte, K. P. (2018). Indigenous science (fiction) for the Anthropocene: Ancestral dystopias and fantasies of climate change crises. *Environment and Planning E: Nature and Space*, 1(1-2), 224-242. <u>https://doi.org/10.1177/2514848618777621</u>
- Young, R. L. (2022). *Literature as a Lens for Climate Change: Using Narratives to Prepare the Next Generation.* Lexington.

Guest Editor Bios

Susan Oliver is Professor of Literature and Environmental Humanities at the University of Essex, UK. Her main interest is late 18th century and Romantic period literature through to the 1860s, transatlantic studies, periodical culture, ecocriticism and environmental writing, and Scottish literature. She has recently designed and delivered a course in Climate Fiction.

Joseph Paul Ferguson is a Lecturer in Science and Environmental Education at Deakin University. He is the Review Editor of the Australian Journal of Environmental Education. His current research explores the synergies between film and science/environmental education and putting pragmatist methodology into practice for better futures.

Cassandra Tytler is an artist and researcher and Forrest Creative Research Fellow working at Edith Cowan University with the Centre for People, Place & Planet. Her research interests lie in the performance of video and its encounter within place, to create a relational and aware politics of resistance to normalising narratives of exclusion.

Peta J. White is an Associate Professor in Science and Environmental Education at Deakin University. She is the Editor-In-Chief of the Australian Journal of Environmental Education. Her current research follows three narratives: science and biology education; sustainability, environmental, and climate change education; and collaborative/activist methodology and research.